

Remarks

Applicants' Claim 1 has been amended by incorporating therein the limitations of Claims 2-5, 8, and 10-20.

As the Examiner has acknowledged, the disclosure of Yamamoto et al. is deficient in many respects by failing to disclose many of the limitations of amended Claim 1. For example, Yamamoto et al. does not disclose that the adsorbent has a high surface area, that metals are dispersed on the adsorbent, that the adsorbent is regenerated using hydrogen, that the adsorbent contains 0.01 to about 10 weight percent of metal, or that the styrene mixture contains more than 100 parts per million of phenylacetylene.

The Examiner has attempted to rectify these deficiencies by modifying the disclosure of Yamamoto et al. in respect to each of the aforesaid deficiencies, by relying on disclosures in Kaminsky et al. '517. However, it is apparent from the large number of modifications to Yamamoto et al. that were necessary, that Yamamoto et al. is inadequate as a component of the combination of references cited by the Examiner. Where a reference is so broad, the likelihood of arriving at the claimed invention would be the same as discovering the combination of a safe by an inspection of its dial. Ex parte Garvey, 41 U.S.P.Q. 583 (P.T.O. Bd. App. 1936); Ex parte Starr, 44 U.S.P.Q. 545 (P.T.O. Bd. app. 1938). A generic disclosure which encompasses a vast number of species does not describe all of the species embraced therein merely because they are within the scope of the generic disclosure. In re Petering et al., 133 U.S.P.Q. 275 (C.C. P.A. 1962); E. I. duPont de Nemours & C. v. Ladd, Comr. Pats., 140 U.S. P.Q. 297 (Ct. App. D.C. 1964).

Furthermore, for an invention to be inherently disclosed in a cited reference, the inherency must be certain. Ex parte Cyba, 155 U.S. P.Q. 756 (P.T.O. Bd. App. 1966), 155 U.S.P.Q. 756 (P.T.O. Bd. App. 1966). Inherency must be a necessary result and not merely a possible result. (In re Oelrich, 212 U.S.P.Q. 323 (C.C.P.A. 1981); Ex parte Keith et al., 154 U.S. P.Q. 320 (P.T.O. Bd. App. 1966).

It is essential to note that there is no disclosure or even suggestion in Kaminsky '517 that the method disclosed therein could be used to purify styrene or any vinyl

aromatic compound by removing therefrom phenylacetylene or any aromatic acetylene compound. Consequently, there is clearly no suggestion in either Yamamoto et al. or Kaminsky et al. to combine their disclosures in the manner proposed by the Examiner. Both the suggestion to carry out the claimed process and the reasonable expectation of success must be found in the prior art, not in Applicants' disclosure. In re Vaeck, 20 U.S.P.Q. 2d 1438 (C.A.F.C. 1991).

That a suggestion to combine Yamamoto et al. and Kaminsky et al. is missing in both these reference is clearly illustrated in Kaminsky et al. '517. Kaminsky '517 discusses Yamamoto et al. and teaches away from the method disclosed in Yamamoto et al. in column 2, line 26 to column 3, line 15 and, in particular, in column 3, lines 5-15 in Kaminsky et al., as follows:

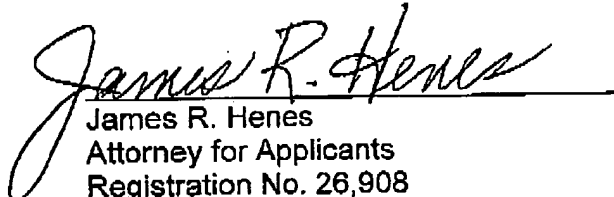
"Each application used fresh adsorption agent and only a short time of one hour on stream at mild conditions of temperature and pressure. Such limited applications were likely because it is well known that acetylene and these acetylene compounds react with copper and/or silver to form copper acetylide or silver acetylide. Both the acetylide of copper and silver are some conditions, then possible formation presents safety problems in operation and in handling adsorbent containing such precipitates."

In this regard, where, as indicated above in Kaminsky et al. '517, a cited reference teaches away from the combination of references proposed by the Examiner, the proposed combination is not a sufficient basis for concluding that the combination would have been obvious. In re Grasselli et al., 218 U.S.P.Q. 769 (C.A.F.C. 1983).

In view of the above amendments and remarks, Applicants respectfully submit that their Claims 1, 6, 7 and 9 are allowable, and reconsideration and allowance thereof are respectfully requested.

Respectfully submitted,

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